



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,415	12/31/2003	R. Kevin Ray	578340326172	9563
7590	11/08/2006		EXAMINER	
Lorri W. Cooper JONES DAY 901 Lakeside Avenue Cleveland, OH 44114			RIGGLEMAN, JASON PAUL	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/749,415	RAY, R. KEVIN
	Examiner Jason P. Riggleman	Art Unit 1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 24-42 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

**Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :10/24/2006,
6/15/2006, 3/8/2004, 12/31/2003.**

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-23, drawn to a pressure washer apparatus, classified in class 134, subclass 174.
 - II. Claims 24-38, drawn to an injector, classified in class 239, subclass 407.
 - III. Claims 39-42, drawn to a spray lance, classified in class 239.

2. Inventions I and II - III are related as combination and subcombinations.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require a non-metallic external member. The subcombinations have separate utility such as an injector for a different spray system and a lance for dispersing a fluid in an alternative spray system.

3. The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or

includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

4. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Lorri W. Cooper on 10/26/2006 a provisional election was made with traverse to prosecute the invention of group 1, claims 1-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "8" and "9" in Figs. 7-8, respectively. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 9 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: claim 16 -- the structure of the "first Venturi" and relationship to structure of pump, claim 9 -- the structure of the cap that imparts the three operative positions.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 19-22 are rejected under 35 U.S.C. 102(b) as being unpatentable by Hara (US Patent Application Publication No. 2002/0000477).

11. Hara teaches the use of a cleaning apparatus with an injector 10, Figs. 2-4, which has a low-pressure chemical inlet 39, a high-pressure fluid inlet 11, and an

external member 21 that partially surrounds the nozzle 24. The injector 10, Fig. 2, has an internal 34 and external 37 passageway, and the external member 21 is positioned partly around the nozzle 24 and the external passageway 37. The external member 21 has a chemical inlet 36 positioned downstream from the nozzle 24 (paragraphs [0041] - [0043]). The injector is configured to spray at least one of a fluid in the low-pressure range and a fluid in a high-pressure range. Hara also teaches a chemical supply 14 connected to the second chemical inlet 39. A chemical supply 14 is coupled to an injector by means of a pump 15. The spray lance 25 is coupled to the injector 10 by means of a nozzle 24.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-5, 11, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (US Patent Application Publication No. 2002/0000477) in view of Teague (US Patent No. 5383605).

14. Hara teaches the use of a pressure-washing device with an injector 10, Figs. 2-4, which has a low-pressure chemical inlet 39, a high-pressure fluid inlet 11, and an external member 21 that partially surrounds the nozzle 24. The injector 10, Fig. 2, has an internal 34 and external 37 passageway, and the external member 21 is positioned partly around the nozzle 24 and the external passageway 37. The nozzle comprises a

nozzle body 26 and nozzle 23 with the nozzle tip having a flow-restricting portion 33.

The external member 21 has a chemical inlet 36 positioned downstream from the nozzle 24 (paragraphs [0041] - [0043]). The injector is configured to spray at least one of a fluid in the low-pressure range and a fluid in a high-pressure range. Hara also teaches a chemical supply 14 connected to the second chemical inlet 39. A chemical supply 14 is coupled to an injector by means of a pump 15. The water supply 18 is connected to a pump 19 that feeds to the high-pressure fluid inlet 11.

15. Hara does not teach a means a first chemical inlet for the pump; a motor associated with the pump; and a spray gun with a trigger and handle; however, Teague teaches a power-spraying device with a pump 58 that has a plurality of solenoid-controlled fluid inlets 63, 64, and 65. The fluid inlets are fed from three chemical tanks 68, 70, and 72, respectively, into fluid passageway 67 and then to the pump 58. A spray wand 40 is connected to the nozzle housing 4 that is connected by hose 44 to the pump 58. A motor 56 is associated with the pump 58. The spray wand 40 has a handle 70 and trigger 78, Fig. 2) for controlling fluid flow (Columns 3-4, Lines 10-68, Lines 0-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hara with Teague to inject detergent downstream of the pump to create a power-spraying device that effectively mixes detergent with water for cleaning.

16. In regards to claim 15, Hara and Teague do not specify the use of a non-corrosive external member and metallic nozzle; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hara and Teague to

Art Unit: 1746

create a spraying apparatus with nozzles/external members resistant to corrosion yet capable of withstanding high-pressure fluid flow.

17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (US Patent Application Publication No. 2002/0000477) and Teague (US Patent No. 5383605), as applied to claims 1-3, above, and further in view of Kranzle (US Patent No. 5405086).

18. Hara and Teague do not teach a cart for housing the chemical supply unit and the pump; however, Kranzle teaches the use of a cart consisting of a housing 2 with wheels 5 for supporting a chemical supply unit 12 and pump 7. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Teague and Hara with Kranzle to create a mobile pressure-cleaning device.

19. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (US Patent Application Publication No. 2002/0000477), as applied to claim 19 above, and further in view of Jones (US Patent No. 6571807).

20. Hara does not teach specific values for the high and low pressure range of the sprayer; however, Jones teaches a variable speed pump with a low-pressure stage, to 200 psi, used for applying soap to the vehicle and a high-pressure stage, to 1250 psi, used for rinsing the vehicle (Columns 3 and 6, Lines 17-29 and 0-8). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Hara with the pressure stages of Jones to create a sprayer with specific high and low pressure capabilities.

21. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (US Patent Application Publication No. 2002/0000477) and Teague (US Patent No. 5383605), as applied to claims 1-4, above, and further in view of Gaymon (US Patent No. 5238191).

22. Hara and Teague do not teach a tank integral with the spray lance; however, Gaymon teaches a wand 14 having a storage bottle 54 integrally mounted and removable, Fig. 2. A first conduit 56 drains fluid from the chemical supply tank 54 into the vicinity of the injector of the wand, which is the nozzle 52 in this case. The tank is removable and an elongated, hollow member made of non-corrosive material with an open end in proximity of the injector. Gaymon does not explicitly teach a cap for the storage tank; however, this would be an inherent feature of the device since it would be necessary for the conduit to be the only exit for the fluid in the tank. A control valve 48 is associated with the conduit and the second chemical inlet of the injector. The materials used are plastic or polymer material for light weight (Column 3, Lines 12-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hara and Teague with Gaymon to create a means for injecting a second chemical upstream of the pump.

Allowable Subject Matter

23. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoenisch et al. (US Patent Application Publication US 2001/0052355) which teaches a multi-container pressure washer with a means for adding chemicals through the pump inlet. Thompson (US Patent No. 3613997) which teaches the benefits of injecting corrosive chemicals downstream of the pump to prevent pump part corrosion.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Riggleman whose telephone number is 571-272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/749,415
Art Unit: 1746

Page 10

Jason P Riggleman
Examiner
Art Unit 1746

JPR



MICHAEL BARR
SUPERVISORY PATENT EXAMINER